The State
of Wyoming

Department of Environmental Quality

ave Freudenthal, Governor

Herschler Building • 122 West 25th Street • Cheyenne, Wyoming 82002

ADMIN/OUTREACH	ABANDONED MINES	AIR QUALITY	INDUSTRIAL SITING	LAND QUALITY	SOLID & HAZ. WASTE	WATER QUALITY
(307) 777-7758	(307) 777-6145	(307) 777-7391	(307) 777-7368	(307) 777-7756	(307) 777-7752	(307) 777-7781
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April 6, 2004

Mr. Ronald O. Hughes
Resident Manager
Solvay Minerals, Inc.
P.O. Box 1167
Green River, WY 82935

Permit No. **MD-995**

Dear Mr. Hughes:

The Division of Air Quality of the Wyoming Department of Environmental Quality has completed final review of Solvay Minerals, Inc.'s application to modify operations at the Green River Soda Ash Plant with the conversion of Calciners A & B from natural gas fired to coal fired, at the facility located in the NE¼ of Section 31, T18N, R109W, approximately twenty (20) miles west of Green River, in Sweetwater County, Wyoming.

Following this agency's proposed approval of the request as published March 5, 2004 and in accordance with Chapter 6, Section 2(m) of the Wyoming Air Quality Standards and Regulations, the public was afforded a 30-day period in which to submit comments concerning the proposed modification, and an opportunity for a public hearing. No comments have been received. Therefore, on the basis of the information provided to us, approval to modify operations at the Green River Soda Ash Plant as described in the application is hereby granted pursuant to Chapter 6, Sections 2 and 4 of the regulations with the following conditions:

1. That authorized representatives of the Division of Air Quality be given permission to enter and inspect any property, premise or place on or at which an air pollution source is located or is being constructed or installed for the purpose of investigating actual or potential sources of air pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

2. That all substantive commitments and descriptions set forth in the application for this permit, unless superseded by a specific condition of this permit, are incorporated herein by this reference and are enforceable as conditions of this permit.

3. That Solvay Minerals shall update operating permit 30-126 per the requirements of Chapter 6, Section 3 of the WAQSR.

4. All notifications, reports, and correspondence required by this permit shall be submitted to the Stationary Source Compliance Program Manager, Air Quality Division, 122 West 25th Street, Cheyenne, Wyoming 82002 and a copy shall be submitted to the District Engineer, Air Quality Division, 250 Lincoln Street, Lander, WY 82520.

5. Solvay Minerals shall furnish the Administrator written notification of: (i) the anticipated date of initial startup not more than 60 days or less than 30 days prior to such date, and; (ii) the actual date of initial start-up within 15 days after such date in accordance with Chapter 6, Section 2(i) of the WAQSR.

6. That the date of commencement of construction shall be reported to the Administrator within 30 days of commencement. In accordance with Chapter 6, Section 2(h) of the WAQSR, approval to construct or modify shall become invalid if construction is not commenced within 24 months after receipt of such approval or if construction is discontinued for a period of 24 months or more. The Administrator may extend the period based on satisfactory justification of the requested extension.

7. That performance tests be conducted, in accordance with Chapter 6, Section 2(j) of the WAQSR, within 30 days of achieving a maximum design rate but not later than 90 days following initial start-up, and a written report of the results be submitted. The operator shall provide 15 days prior notice of the test date. If a maximum design rate is not achieved within 90 days of start-up, the Administrator may require testing be done at the rate achieved and again when a maximum rate is achieved.

8. Initial performance tests, required by Condition 7 of this permit, shall consist of the following unless an alternative is approved in writing by the Division:

   A) Source #17:

      i) NO_x - A 30 day test shall be used to determine initial compliance with emission limits established by this permit.

      ii) PM_{10} - Three tests, each at least one (1) hour in duration, using EPA Reference Method 5 Sampling trains, with the back half impinger catch analyzed by the protocol defined by Reference Method 202. The Division will compare the sum of the Reference Method 5 front half particulate catch and the inorganic (mineral) portion of the Reference Method 202 back half of these Method 5/202 tests, against the particulate emission standards set in condition 10.

      iii) SO_2 - Three tests, each at least one (1) hour in duration, using EPA Reference Methods 1-4 and 6C, or an approved equivalent method, shall be performed to confirm that SO_2 emissions are negligible as represented in the application.

   B) Source #10, #11, #14, and #100:

      i) PM_{10} - Three 1 hour tests following EPA Reference Methods 1-5 shall be used to determine initial compliance with emission limits established by this permit.

9. Prior to any performance testing or monitor certification testing required by this permit, a test protocol shall be submitted to the Division for approval, at least 30 days prior to testing. Results of the tests shall be submitted to this office within 45 days of completion.

10. Within 90 days of initial start-up, Source #17 shall be tested to determine the ammonia slip from the SNCR systems. NH_3 emissions shall be determined following EPA Conditional Test Method 27 (CTM-027) or equivalent methods. Results of the tests shall be reported in units of lb/hr and ppm, on a dry basis corrected to 3 percent O_2. The amount of ammonia being injected into the furnace during the testing period shall also be recorded. A test protocol shall be submitted to the Division for approval, at least 30 days prior to testing. Results of the tests shall be submitted to this office within 45 days of completion.

11. Emissions from Source #17 shall be limited as follows:

	lb/MMBtu (30-day rolling ave)	lb/hr (30-day rolling ave)	TPY
NO_x	0.29	116.0	508.1
	gr/dscf	**lb/hr**	**TPY**
PM_{10}	0.02	41.1	180.2

12. Emissions from Source #10, #11, #14 and #100 shall be limited as follows:

Source	gr/dscf	lb/hr	TPY
#10	0.01	0.3	1.1
#11	0.01	0.2	0.9
#14	0.01	0.4	1.6
#100	0.01	0.2	0.9

13. That the coal bunker baghouse, Source #100, shall be limited to less than 20% opacity as determined by 40 CFR Part 60, Appendix A, Method 9.

14. That Solvay shall comply with all applicable requirements of 40 CFR Part 60, Subpart Y as they pertain to coal handling sources #10, #11, #14, and #100.

15. That the operating hours limitation for sources #10, #11, and #14 is removed through this permitting action.

16. That the trona ore feed rate to each of the "A" and "B" Calciners (unit 17) shall not exceed a maximum instantaneous production rate of 160 TPH.

17. The following continuous emission monitoring (CEM) equipment shall be used to demonstrate continuous compliance with the NO_X emission limits set forth in condition 10 of this permit:

A) Solvay Minerals shall install, calibrate, operate, and maintain a CEM system, and record the output, for measuring NO_x emissions discharged to the atmosphere in units of lb/MMBtu and lb/hr. The CEM system shall consist of the following:

i) A continuous emission NO_x monitor located in the common stack for Calciners A & B.

ii) An in-stack monitor for measuring oxygen content of the flue gas at the location NO_x emissions are monitored.

iii) A continuous flow monitoring system for measuring the flow of exhaust gases discharged into the atmosphere.

B) Each continuous monitor system listed in this condition shall comply with the monitoring requirements of WAQSR, Chapter 5, Section 2(j) including the following:

i) 40 CFR 60, Appendix B, Performance Specification 2 for NO_X and Performance Specification 3 for O_2. The monitoring systems must demonstrate linearity in accordance with Division requirements and be certified in terms of concentration (ppm,), lb/hr and lb/MMBtu.

ii) Quality Assurance requirements of 40 CFR 60, Appendix F.

iii) Solvay Minerals Corporation shall develop and submit for the Division's approval a Quality Assurance plan for the monitoring system listed in this condition.

18. Following the initial compliance test, compliance with the NO_X emission limits set forth in condition 10 of this permit shall be determined with data from the CEM systems required by condition 16 of this permit as follows:

A) Exceedances of the limit shall be defined as follows:

i) Any 30-day rolling average of NO_X emissions which exceeds the lb/MMBtu or lb/hr limits established in this permit calculated using the arithmetic average of the previous 30-days of 1-hour averages meeting the requirements of WAQSR, Chapter 5, Section 2(j). Data (and associated monitoring data hours) which do not meet the requirements of WAQSR, Chapter 5, Section 2(j) shall not be included in the averages.

B) Solvay Minerals shall comply with all reporting and record keeping requirements as specified in Chapter 5, Section 2(g). Excess NO_X emissions shall be reported in units of lb/MMBtu and lb/hr.

It must be noted that this approval does not relieve you of your obligation to comply with all applicable county, state, and federal standards, regulations or ordinances. Special attention must be given to Chapter 6, Section 2 of the Wyoming Air Quality Standards and Regulations, which details the requirements for compliance with conditions 5, 6 and 7, and to Chapter 6, Section 3 of the Wyoming Air Quality Standards and Regulations, which details the requirements for compliance with condition 3. Any appeal of this permit as a final action of the Department must be made to the Environmental Quality Council within sixty (60) days of permit issuance per Section 16, Chapter I, General Rules of Practice and Procedure, Department of Environmental Quality.

If we may be of further assistance to you, please feel free to contact this office.

Sincerely,

Dan Olson
Administrator
Air Quality Division

John V. Corra
Director
Dept. of Environmental Quality

cc: Tony Hoyt

DO/cs